

RF MEASUREMENT REPORT

FCC ID: Q9DASIN0306
Applicant: Hewlett Packard Enterprise
Product: HPE Aruba User Experience Sensor
Model No.: ASIN0306
Trademark:  , 
FCC Rule Part(s): Part 2, 22 (H), 24 (E), 27, 90(S)
Result: Complies
Received Date: 2023-06-15
Test Date: 2023-06-19 ~ 2023-07-10

Reviewed By:

Jame Yuan

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2306RSU027-U9	V01	Initial Report	2023-09-22	Valid

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1.4. Product Information

Product Name	HPE Aruba User Experience Sensor
Model No.	ASIN0306
IMEI	862771043972051 862771043973968 862771043972036
Software Version	17.10 RC188.25026
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Bluetooth Specification	BLE only
ZigBee Specification	802.15.4
Power Type	AC/DC Adapter Input
Operating Temperature	0 ~ 40 °C
Operating Environment	Indoor Use
Integrated Modular Information	
Specification	Model Number: EG21-G FCC ID: XMR201906EG21G GSM 850, PCS 1900 Supported UTRA Band: 2, 4, 5 Supported E-UTRA Band: FDD Band: 2, 4, 5, 7, 12, 13, 25, 26 TDD Band: 38, 41 GNSS: GPS, BDS, GLONASS, Galileo
Accessories	
AC/DC Adapter	Model No.: WB-12G12R Input: 100-240V, 50/60Hz, 0.3A Max Output: 12.0V=1.0A 12.0W
Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Radio Specification Under Testing

GSM Specification	
TX Frequency Range	GSM850: 824 ~ 849 MHz; PCS1900: 1850 ~ 1910 MHz
RX Frequency Range	GSM850: 869 ~ 894 MHz; PCS1900: 1930 ~ 1990 MHz
Power Class	GSM850: 4, DCS1900: 1
UMTS Specification	
TX Frequency Range	WCDMA Band II: 1850 ~ 1910MHz, WCDMA Band IV: 1710 ~ 1755MHz WCDMA Band V: 824 ~ 849MHz
RX Frequency Range	WCDMA Band II: 1930 ~ 1990MHz, WCDMA Band IV: 2110 ~ 2155MHz WCDMA Band V: 869 ~ 894MHz
Power Class	3
E-UTRA Specification	
TX Frequency Range	Band 2: 1850 ~ 1910 MHz; Band 4: 1710 ~ 1755 MHz Band 5: 824 ~ 849 MHz; Band 7: 2500 ~ 2570 MHz Band 12: 699 ~ 716 MHz; Band 13: 777 ~ 787 MHz Band 25: 1850 ~ 1915 MHz; Band 26: 814 ~ 849 MHz Band 38: 2570 ~ 2620 MHz; Band 41: 2496 ~ 2690 MHz
RX Frequency Range	Band 2: 1930 ~ 1990 MHz; Band 4: 2110 ~ 2155 MHz Band 5: 869 ~ 894 MHz; Band 7: 2620 ~ 2690MHz Band 12: 729 ~ 746 MHz; Band 13: 746 ~ 756 MHz; Band 25: 1930 ~ 1995 MHz; Band 26: 859 ~ 894 MHz Band 38: 2570 ~ 2620 MHz; Band 41: 2496 ~ 2690 MHz
Power Class	3

1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	Max Peak Gain (dBi)
GSM 850	824 ~ 849	PIFA	0.1
PCS 1900	1850 ~ 1910		2.2
WCDMA Band II	1850 ~ 1910		2.2
WCDMA Band IV	1710 ~ 1755		3.7
WCDMA Band V	824 ~ 849		0.1
LTE Band 2	1850 ~ 1910		2.2
LTE Band 4	1710 ~ 1755		3.7
LTE Band 5	824 ~ 849		0.1
LTE Band 7	2500 ~ 2570		2.1
LTE Band 12	699 ~ 716		1.7
LTE Band 13	777 ~ 787		1.6
LTE Band 25	1850 ~ 1915		2.2
LTE Band 26	814~849		0.1
LTE Band 38	2570 ~ 2620		2.1
LTE Band 41	2496 ~ 2690		2.1

Note: The antenna gain is from antenna report that was provided by the applicant.

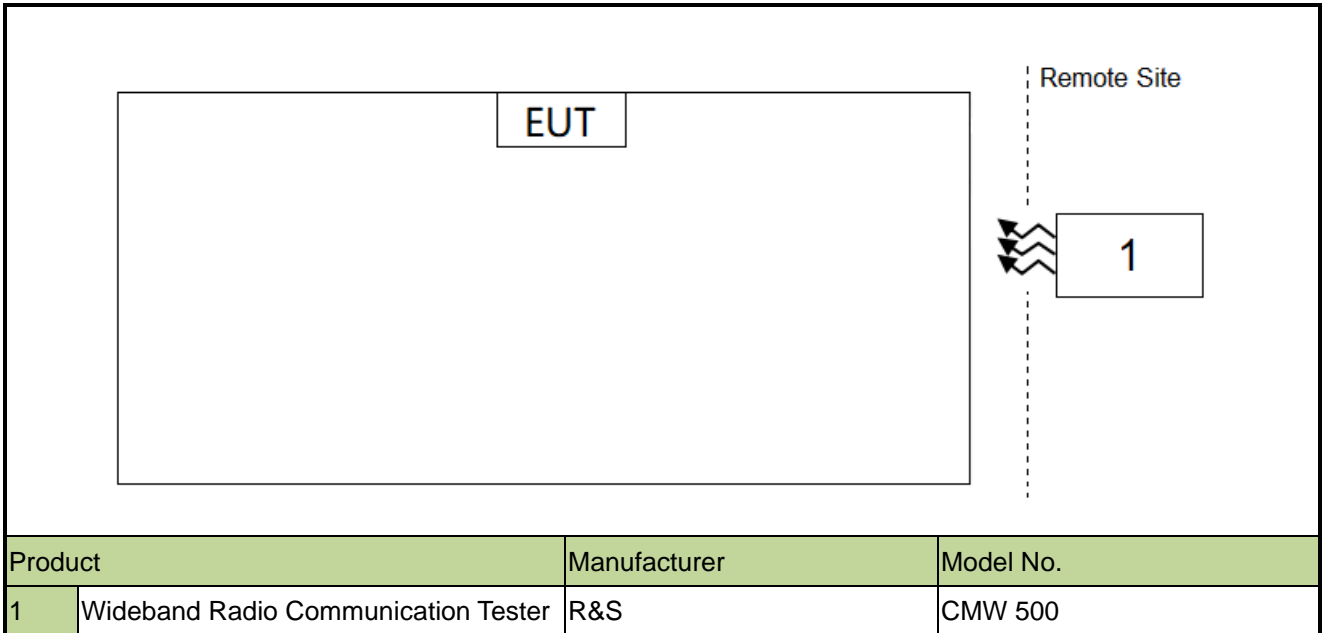
1.7. Test Methodology

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90
- ANSI C63.26:2015
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems

2. Test Configuration

2.1. Test System Connection Diagram



2.2. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

3. Measuring Instrument

Instrument Name	Manufacturer	Model No.	Asset No.	Cali. Interval	Cal. Due Date	Test Site
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06598	1 year	2023-11-05	SIP-AC2
Preamplifier	EMCI	EMC051845SE	MRTSUE06601	1 year	2023-11-22	SIP-AC2
Thermohygrometer	testo	608-H1	MRTSUE06623	1 year	2023-11-27	SIP-AC2
Thermohygrometer	testo	608-H1	MRTSUE06624	1 year	2023-11-27	SIP-AC2
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06647	1 year	2024-06-17	SIP-AC2
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2023-12-22	SIP-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06648	1 year	2023-10-22	SIP-AC2
Communication Tester	R&S	CMW500	MRTSUE06243	1 year	2023-10-08	SIP-SR1
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2024-05-15	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2024-05-23	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2023-11-27	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2023-10-13	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2024-05-07	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2024-04-20	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11038	1 year	2023-11-01	WZ-AC2
Communication Tester	R&S	CMW500	MRTSUE06108	1 year	2023-11-25	WZ-SR6
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2023-12-28	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2023-08-22	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2024-05-07	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2024-06-09	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2024-04-20	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2024-05-31	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2023-12-28	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE11039	1 year	2023-11-01	WZ-AC1
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2023-09-29	WZ-AC1
Horn Antenna	ETS	3117	MRTSUE06257	1 year	2023-09-18	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2023-11-05	WZ-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2024-01-12	WZ-AC1
Preamplifier	EMCI	EMC051845SE	MRTSUE06987	1 year	2023-09-08	WZ-AC1

Software	Version	Function
EMI V3	V 3.0.0	EMI Test Software
Controller_MF 7802	2.03C	RE Antenna & Turntable
Controller_MF 7802BS	1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Spurious Emissions

The maximum measurement uncertainty is evaluated as:

Coaxial: 9kHz~30MHz: 2.59dB

Coplanar: 9kHz~30MHz: 2.60dB

Horizontal: 30MHz~200MHz: 3.85dB

200MHz~1GHz: 4.36dB

1GHz~40GHz: 4.98dB

Vertical: 30MHz~200MHz: 4.06dB

200MHz~1GHz: 5.28dB

1GHz~40GHz: 4.91dB

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result
2.1053, 22.917(a), 24.238(a), 27.53(c) (f) (g) (h) (m), 90.691(a)	Spurious Emissions	Radiated	Pass

Notes:

- 1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 2) All supported modulation types were evaluated. The worst-case emission of modulation was selected. Therefore, the Radiated Spurious Emission was presented the worst-case in the test report.
- 3) For radiated emission tests, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
- 4) LTE Band 26 (814 ~ 849 MHz) overlaps the entire frequency range of LTE Band 5 (824 ~ 849 MHz). Therefore, test data provided in this report covers Band 5 as well as Band 26.
- 5) LTE Band 25 (1850 ~ 1915 MHz) overlaps the entire frequency range of LTE Band 2 (1850 ~ 1910 MHz). Therefore, test data provided in this report covers Band 2 as well as Band 25.
- 6) LTE Band 41 (2496 ~ 2690 MHz) overlaps the entire frequency range of LTE Band 38 (2570 ~ 2620 MHz). Therefore, test data provided in this report covers Band 38 as well as Band 41.

5.2. Radiated Spurious Emissions Measurement

5.2.1. Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

For Band 7, 38, 41: For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth.

For LTE Band 13, For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW (-50dBm) EIRP for discrete emissions of less than 700 Hz bandwidth.

E (dB μ V/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dB μ V/m or 70.3dB μ V/m or 55.3dB μ V/m.

5.2.2. Test Procedure

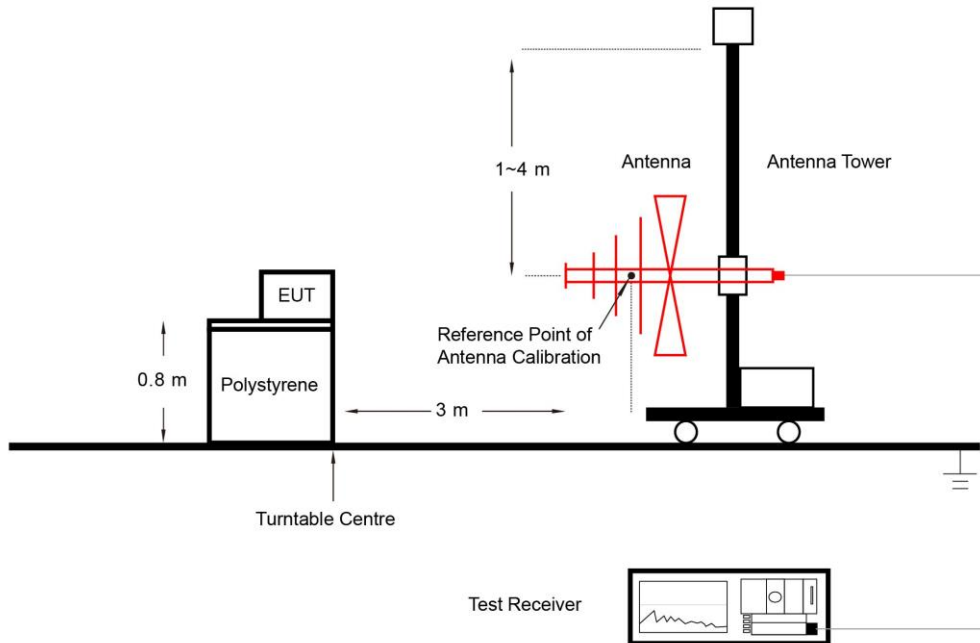
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.2.3. Test Setting

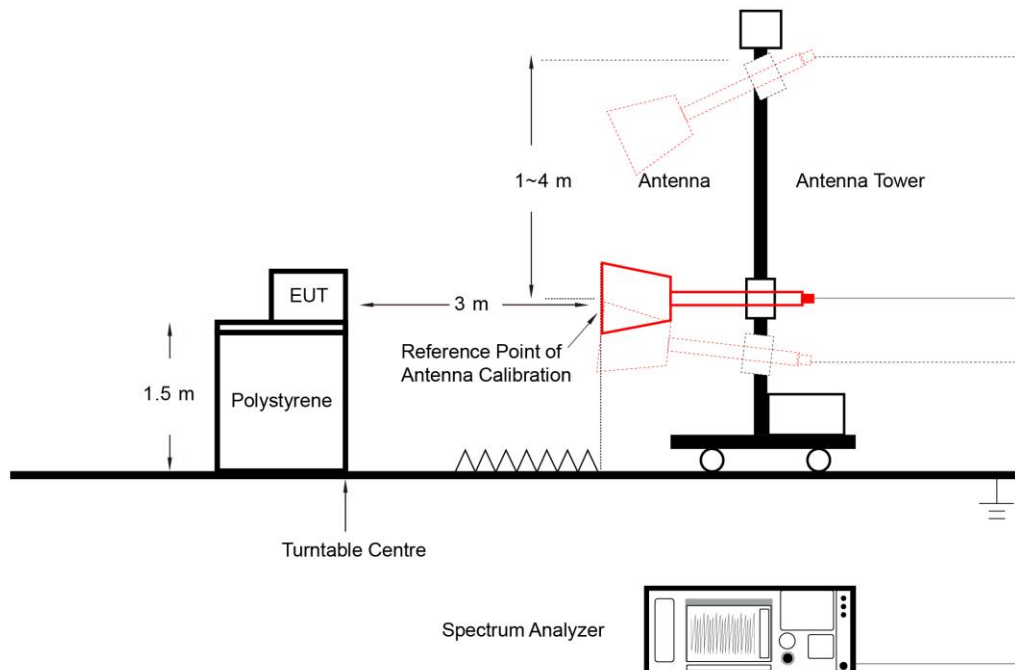
1. RBW = 1MHz
2. VBW \geq 3*RBW
3. Sweep time \geq 10 \times (number of points in sweep) \times (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.2.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.2.5. Test Result

Refer to Appendix A.1.

Appendix A - Test Result

A.1 Radiated Spurious Emissions Test Result

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-08-03	Test Band	GSM850, BPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
163.375	8.7	15.9	24.6	82.3	-57.7	Quasi-peak	Horizontal
197.810	7.1	18.9	26.0	82.3	-56.3	Quasi-peak	Vertical
126.030	8.1	15.8	23.9	82.3	-58.4	Quasi-peak	Horizontal
197.810	10.4	18.9	29.3	82.3	-53.0	Quasi-peak	Vertical
1646.000	54.1	-5.7	48.4	82.3	-33.9	Peak	Horizontal
2470.500	63.3	-2.7	60.6	82.3	-21.7	Peak	Vertical
1646.000	57.7	-5.7	52.0	82.3	-30.3	Peak	Horizontal
2470.500	60.8	-2.7	58.1	82.3	-24.2	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-08-03	Test Band	PCS1900, BPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
326.335	27.4	19.2	46.6	82.3	-35.7	Quasi-peak	Horizontal
613.455	24.9	25.7	50.6	82.3	-31.7	Quasi-peak	Vertical
35.335	21.1	17.1	38.2	82.3	-44.1	Quasi-peak	Horizontal
614.910	17.7	25.7	43.4	82.3	-38.9	Quasi-peak	Vertical
5547.500	57.5	-7.8	49.7	82.3	-32.6	Peak	Horizontal
16937.500	47.3	5.3	52.6	82.3	-29.7	Peak	Vertical
7910.500	51.2	-3.5	47.7	82.3	-34.6	Peak	Horizontal
16835.500	49.3	4.5	53.8	82.3	-28.5	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	WCDMA Band II

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
206.540	6.4	14.9	21.3	82.3	-61.0	Quasi-peak	Horizontal
704.150	3.7	26.9	30.6	82.3	-51.7	Quasi-peak	Vertical
32.425	15.1	17.4	32.5	82.3	-49.8	Quasi-peak	Horizontal
142.520	9.7	17.9	27.6	82.3	-54.7	Quasi-peak	Vertical
7409.000	47.0	8.3	55.3	82.3	-27.0	Peak	Horizontal
9262.000	39.7	11.9	51.6	82.3	-30.7	Peak	Vertical
7409.000	41.6	8.3	49.9	82.3	-32.4	Peak	Horizontal
9262.000	42.0	11.9	53.9	82.3	-28.4	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	WCDMA Band IV

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
208.480	7.4	14.9	22.3	82.3	-60.0	Quasi-peak	Horizontal
715.790	2.1	27.0	29.1	82.3	-53.2	Quasi-peak	Vertical
31.940	12.7	17.3	30.0	82.3	-52.3	Quasi-peak	Horizontal
132.820	10.6	17.1	27.7	82.3	-54.6	Quasi-peak	Vertical
3422.500	51.9	-1.0	50.9	82.3	-31.4	Peak	Horizontal
8556.500	44.1	9.5	53.6	82.3	-28.7	Peak	Vertical
6856.500	40.9	6.7	47.6	82.3	-34.7	Peak	Horizontal
8565.000	41.4	9.6	51.0	82.3	-31.3	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	WCDMA Band V

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
144.460	3.2	18.0	21.2	82.3	-61.1	Quasi-peak	Horizontal
208.965	10.1	14.9	25.0	82.3	-57.3	Quasi-peak	Vertical
32.425	15.4	17.4	32.8	82.3	-49.5	Quasi-peak	Horizontal
142.520	11.2	17.9	29.1	82.3	-53.2	Quasi-peak	Vertical
2479.000	50.4	-3.1	47.3	82.3	-35.0	Peak	Horizontal
3303.500	43.3	-1.3	42.0	82.3	-40.3	Peak	Vertical
2479.000	43.7	-3.1	40.6	82.3	-41.7	Peak	Horizontal
3303.500	42.5	-1.3	41.2	82.3	-41.1	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 2/25, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
36.790	1.9	17.7	19.6	82.3	-62.7	Quasi-peak	Horizontal
205.570	8.2	14.9	23.1	82.3	-59.2	Quasi-peak	Vertical
32.425	15.2	17.4	32.6	82.3	-49.7	Quasi-peak	Horizontal
143.005	13.0	17.9	30.9	82.3	-51.4	Quasi-peak	Vertical
7400.500	49.1	8.3	57.4	82.3	-24.9	Peak	Horizontal
9253.500	48.6	11.7	60.3	82.3	-22.0	Peak	Vertical
9253.500	48.8	11.7	60.5	82.3	-21.8	Peak	Horizontal
11098.000	43.6	13.4	57.0	82.3	-25.3	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 4, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
205.085	9.1	14.9	24.0	82.3	-58.3	Quasi-peak	Horizontal
845.770	2.2	29.1	31.3	82.3	-51.0	Quasi-peak	Vertical
32.910	17.2	17.4	34.6	82.3	-47.7	Quasi-peak	Horizontal
142.035	12.6	17.9	30.5	82.3	-51.8	Quasi-peak	Vertical
3422.500	59.7	-1.0	58.7	82.3	-23.6	Peak	Horizontal
5131.000	54.4	3.8	58.2	82.3	-24.1	Peak	Vertical
5131.000	50.1	3.8	53.9	82.3	-28.4	Peak	Horizontal
8548.000	45.7	9.4	55.1	82.3	-27.2	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 5, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
36.790	1.9	17.7	19.6	82.3	-62.7	Quasi-peak	Horizontal
205.570	8.2	14.9	23.1	82.3	-59.2	Quasi-peak	Vertical
32.425	15.2	17.4	32.6	82.3	-49.7	Quasi-peak	Horizontal
143.005	13.0	17.9	30.9	82.3	-51.4	Quasi-peak	Vertical
3295.000	50.5	-1.2	49.3	82.3	-33.0	Peak	Horizontal
4119.500	50.8	1.2	52.0	82.3	-30.3	Peak	Vertical
3295.000	52.0	-1.2	50.8	82.3	-31.5	Peak	Horizontal
9066.500	39.4	10.8	50.2	82.3	-32.1	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 7, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
141.550	7.9	17.9	25.8	70.3	-44.5	Quasi-peak	Horizontal
975.265	1.3	30.2	31.5	70.3	-38.8	Quasi-peak	Vertical
30.970	18.2	17.4	35.6	70.3	-34.7	Quasi-peak	Horizontal
127.970	7.4	16.7	24.1	70.3	-46.2	Quasi-peak	Vertical
5003.500	53.9	3.4	57.3	70.3	-13.0	Peak	Horizontal
10001.500	46.8	12.8	59.6	70.3	-10.7	Peak	Vertical
7502.500	46.4	8.4	54.8	70.3	-15.5	Peak	Horizontal
10001.500	49.0	12.8	61.8	70.3	-8.5	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 12, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
146.885	2.3	18.0	20.3	82.3	-62.0	Quasi-peak	Horizontal
204.600	7.9	14.9	22.8	82.3	-59.5	Quasi-peak	Vertical
32.425	14.9	17.4	32.3	82.3	-50.0	Quasi-peak	Horizontal
133.305	12.7	17.2	29.9	82.3	-52.4	Quasi-peak	Vertical
1399.500	52.8	-5.5	47.3	82.3	-35.0	Peak	Horizontal
2793.500	48.1	-2.1	46.0	82.3	-36.3	Peak	Vertical
1399.500	56.1	-5.5	50.6	82.3	-31.7	Peak	Horizontal
2793.500	45.6	-2.1	43.5	82.3	-38.8	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 13, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
150.280	12.9	18.1	31.0	82.3	-51.3	Quasi-peak	Horizontal
476.685	11.9	22.9	34.8	82.3	-47.5	Quasi-peak	Vertical
198.295	16.2	15.0	31.2	82.3	-51.1	Quasi-peak	Horizontal
477.170	12.0	22.9	34.9	82.3	-47.4	Quasi-peak	Vertical
1561.000	55.3	-6.1	49.2	55.3	-6.1	Peak	Horizontal
3116.500	53.9	-0.8	53.1	82.3	-29.2	Peak	Vertical
1561.000	54.1	-6.1	48.0	55.3	-7.3	Peak	Horizontal
3116.500	49.2	-0.8	48.4	82.3	-33.9	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 26, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
210.905	7.3	14.9	22.2	82.3	-60.1	Quasi-peak	Horizontal
629.945	3.2	26.0	29.2	82.3	-53.1	Quasi-peak	Vertical
32.425	16.9	17.4	34.3	82.3	-48.0	Quasi-peak	Horizontal
128.455	12.7	16.7	29.4	82.3	-52.9	Quasi-peak	Vertical
3261.000	51.8	-1.1	50.7	82.3	-31.6	Peak	Horizontal
4068.500	48.0	0.9	48.9	82.3	-33.4	Peak	Vertical
1629.000	51.9	-6.2	45.7	82.3	-36.6	Peak	Horizontal
3261.000	49.0	-1.1	47.9	82.3	-34.4	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-06-19 ~ 2023-07-10	Test Band	LTE Band 38/41, 1RB, QPSK

Frequency (MHz)	Reading Level (dB μ V)	Factor (dB/m)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
Low Channel							
130.880	14.6	17.0	31.6	70.3	-38.7	Quasi-peak	Horizontal
971.870	0.2	30.3	30.5	70.3	-39.8	Quasi-peak	Vertical
31.455	19.1	17.4	36.5	70.3	-33.8	Quasi-peak	Horizontal
129.425	9.1	16.8	25.9	70.3	-44.4	Quasi-peak	Vertical
7485.500	48.0	8.5	56.5	70.3	-13.8	Peak	Horizontal
9984.500	46.4	13.0	59.4	70.3	-10.9	Peak	Vertical
7485.500	46.9	8.5	55.4	70.3	-14.9	Peak	Horizontal
9984.500	46.0	13.0	59.0	70.3	-11.3	Peak	Vertical

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Appendix B - Test Setup Photograph

Refer to "2306RSU027-UT" file.

Appendix C - EUT Photograph

Refer to "2306RSU027-UE" file.

————— The End —————